



DOCUMENT REVIEW

PROCEDURE ID: YMP-LBNL-QIP-6.1

REV. 2, MOD. 0

EFFECTIVE: 6/2/97

1. PURPOSE

This Quality Implementing Procedure (QIP) defines the responsibilities and provides for the review of Yucca Mountain Project (YMP) Ernest Orlando Lawrence Berkeley National Laboratory (LBNL) documents, as determined to need review by the Project Manager (PM) or designee and/or the Engineering Assurance (EA) Manager. Such documents include, but are not limited to, journal articles, reports, QIPs, and Technical Implementing Procedures (TIPs).

2. SCOPE

This QIP applies to the activities of document authors and reviewers during the review process of any document. It also applies to the review of any requirements documents, such as QIPs or TIPs, as required by procedure or, if determined to be necessary by the PM or designee, EA Manager, or Principal Investigator (PI) (for technical procedures).

3. PROCEDURE

- 3.1 The author(s) of a document begins the review process by requesting the PM or designee to appoint the reviewers. The author(s) may recommend potential reviewers to the PM or designee. The review shall be conducted by individuals other than the author(s) of the document.
- 3.2 Reviewers shall consider the review criteria established by the appropriate manager or referenced in the applicable procedure. The review criteria shall include consideration of the technical adequacy, correctness, accuracy, completeness, and applicability of the document under review. For QA reviews, review criteria shall include compliance with the current version of the Quality Assurance Requirements and Description (QARD) and other applicable YMP-LBNL requirements documents. See Attachment 3 of this procedure for review criteria.
- 3.3 The PM or designee shall appoint reviewers and the EA Manager or designee shall instruct them in the review process.
 - 3.3.1 A minimum of two technical reviewers and one a engineering assurance reviewer are required to review documents requiring review. Scientific notebooks shall be reviewed by one technical and one EA reviewer. According to YMP-LBNL-QIP-SIII.0 all documents under review require at least one reviewer from each organization affected by the document. The Office of Quality Assurance shall review QIPs, TIPs, and any modifications thereto.

- 3.3.2 Each reviewer shall be technically competent in the subject area being reviewed. Documentation of reviewer qualifications shall include a signed and dated Reviewer Qualification Verification Statement (RQVS), (see Attachment 1), which shall be maintained by the YMP-LBNL Records Processing Center in the "Qualified Reviewer File." This need only be done once for each reviewer, not for each review. All reviewers shall be trained to the latest revision of this procedure prior to performing a review.
- 3.4 Relevant background information or data shall be provided as necessary to the reviewers.
- 3.5 Reviewers shall review the document according to the established review criteria. Changes to the document shall also be reviewed by technically competent reviewers. Data considered as established fact by the scientific and engineering community do not require validation (e.g., information in scientific or engineering handbooks).
- 3.6 The reviewer shall consider all aspects of the document under review and complete the Document Review/Comment Resolution Form (DRCR), (see Attachment 2). Editorial comments, such as spelling, grammar, or syntax may be made on the manuscript. Comments on substantive aspects shall be made on the DRCR, and clearly labeled mandatory (M) or non-mandatory (NM). Mandatory comments are those that require resolution whereas non-mandatory are only suggested changes. If there are no comments, the reviewer shall mark it as such.
- 3.7 When the review is complete, the reviewer shall sign and date the DRCR and return it and the document to the author(s).
- 3.8 The author(s) shall consider and respond to mandatory comments. Author responses shall be recorded in the appropriate columns of the DRCR. The author(s) need not accept each mandatory comment but the rejection of specific mandatory comments and the reasons for rejection shall be recorded on the DRCR. The revised document and DRCR shall be returned to the reviewer(s) for comment resolution.
- 3.9 The reviewer shall indicate acceptance or rejection of the author(s) response by initialing in the appropriate column of the DRCR. Direct interaction between the author(s) and reviewers is encouraged to resolve outstanding issues. When such issues cannot be resolved, they shall be referred to the PM for resolution. Unresolved issues involving the OQA representative shall be referred to successively higher levels of management within YMP-LBNL and OQA for resolution.

- 3.10** The completed document shall be processed according to the YMP-LBNL procedures for Document Control (YMP-LBNL-QIP 6.0), Preparing Quality and Technical Implementing Procedures (YMP-LBNL-QIP 5.2), and the LBNL administrative procedures for publications, as appropriate.

4. RECORDS MANAGEMENT

4.1 Lifetime

Final reviewed documents
Any other relevant information

4.2 Non-permanent

Reviewer Qualification Verification Statement
YMP-LBNL Document Review / Comment Resolution Form
Review Criteria
Reviewed Drafts

4.3 Controlled Documents

None

4.4 Records Center Documents

Records associated with this procedure shall be submitted to YMP-LBNL Records Processing Center in accordance with YMP-LBNL-QIP-17.0 and AP-17.1Q.

5. RESPONSIBILITIES

- 5.1 The Project Manager (PM)** or a designee is responsible for appointing reviewers for YMP-LBNL documents on the basis of education, training and experience. The PM or designee shall review the record of the technical document review process to assure that it has been properly completed. The PM or designee shall make the final disposition of disputed comments.
- 5.2 The Engineering Assurance Office** is responsible for reviewing EA-related documents. The EA staff is also responsible for ensuring that all reviewers who do not have previously documented qualifications on file will fill out the RQVS form prior to performing the review.
- 5.3 Author(s)** are responsible for handling the review arrangements. Generally, for multiple-author documents, the first author shall have responsibility for handling the review arrangements, but if the first author is not available, another author may be designated by the PM or designee to do so. The author shall distribute copies of the document, along with the appropriate forms and requested background information and data to be reviewed, to the designated reviewers. Upon return of reviews, the author(s) shall consider all substantive comments and respond to all mandatory comments made by the reviewers.

- 5.4 **Reviewers** are responsible for reviewing the document and providing written comments in the DRCR. The comments shall be returned to the authors in a timely manner.
- 5.5 **The OQA Representative** is responsible for review of QIPS and TIPs for compliance with applicable QARD requirements.

6. ACRONYMS AND DEFINITIONS

6.1 Acronyms

DRCR — Document Review/Comment Resolution Form
RQVS — Reviewer Qualification Verification Statement

6.2 Definitions

Author: A person who has made a material contribution to the work and composition, whose name appears on the manuscript and who accepts professional responsibility for its contents.

Reviewer: A person with education, training and experience that allows him/her to understand the contents of the document being reviewed. A reviewer shall not have participated in the work being reported in the document under review.

7. REFERENCES

AP-17.1Q, *Record Source Responsibilities for Inclusionary Records*
DOE/RW/0333P, *Quality Assurance Requirements and Description*
YMP-LBNL-QIP-5.2, *Preparing Quality & Technical Implementing Procedures*
YMP-LBNL-QIP-6.0, *Document Control*
YMP-LBNL-QIP-17.0 *Submitting records to the YMP-LBNL Records Processing Center*
YMP-LBNL-QIP-SIII.0, *Scientific Investigation*

8. ATTACHMENTS

Attachment 1: Reviewer Qualification Verification Statement
Attachment 2: Document Review/Comment Resolution Form
Attachment 3: Document Review Criteria

9. REVISION HISTORY

- 9/6/95 - Revision 0, Modification 1:
Modification to address administrative and grammatical changes.
- 12/7/95 - Revision 0, Modification 2:
Modification to incorporate review criteria directly into procedure based on comments raised during audit.
Modification to require two technical reviews for documents and to address that technical documents unless specified in an applicable procedure, do not require a QA review.
- 9/9/96 - Revision 1, Modification 0:
Revised procedure to reflect requirements changes in QARD, Rev. 5.
- 6/2/97 - Revision 2, Modification 0:
Revised procedure to introduce the term Engineering Assurance (EA) and to identify the role and responsibilities of the EA Manager and OQA representative in document reviews.

10. APPROVALS

Preparer:

Date

Technical Reviewer:

Date

Technical Reviewer:

Date

QA Reviewer:

Date

QA Manager:

Date

Project Manager:

Date